

In re EARL T. COHEN, Application No. 10/617,539  
Amendment A

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1 (currently amended): A method for adaptively adjusting values, the method comprising:

maintaining a first residue amount corresponding to a first set of one or more packet queues or streams of packets;

identifying a first particular packet length of a first packet associated with the first set of said one or more packet queues or streams of packets;

determining a first adjusted packet length, corresponding to the first particular packet length, based on the first particular packet length and the first residue amount; ~~and~~

updating the first residue amount based on the first residue amount and the first particular packet length; and

performing one or more packet operations associated with the first packet based on the first adjusted packet length.

Claim 2 (canceled)

Claim 3 (currently amended): The method of ~~claim 2~~ claim 1, wherein said one or more packet operations associated with the first packet includes scheduling the first packet.

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Claim 4 (original): The method of claim 1, comprising:  
maintaining a second residue amount corresponding to a second set of said one or more packet queues or streams of packets;  
identifying a second particular packet length of a second packet associated with the second set of said one or more packet queues or streams of packets;  
determining a second adjusted packet length, corresponding to the second particular packet length, based on the second particular packet length and the second residue amount;  
and  
updating the second residue amount based on the second residue amount and the second particular packet length.

Claim 5 (currently amended): The method of claim 4, comprising performing one or more packet operations associated with the ~~first and second packets~~ second packet based on the ~~first and second adjusted packet lengths~~ length.

Claim 6 (original): The method of claim 5, wherein said one or more packet operations associated with the first and second packets includes scheduling the first and second packets.

Claim 7 (original): The method of claim 1, wherein the first particular packet length includes a first least significant portion; and  
wherein said updating the first residue amount includes adding the first residue amount and the first least significant portion.

Claim 8 (original): The method of claim 7, wherein the first particular packet length includes the first least significant portion and a first most significant portion; and  
wherein said determining the first adjusted packet length includes identifying whether to use the first most significant portion as the first adjusted packet length or a value based on the first most significant portion.

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Claim 9 (original): The method of claim 8, wherein the value is one more than the first most significant portion.

Claim 10 (original): The method of claim 8, wherein said identifying whether to use the first most significant portion as the first adjusted packet length or a value based on the first most significant portion is performed based on a result of said updating the first residue amount.

Claim 11 (canceled)

Claim 12 (currently amended): The method of ~~claim 11~~ claim 8, wherein said one or more packet operations associated with the first packet includes scheduling the first packet.

Claim 13 (original): The method of claim 1, wherein the first residue amount is a lagging behind indication.

Claim 14 (original): The method of claim 1, wherein the first residue amount is a forward looking indication.

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Claim 15 (original): An apparatus for adaptively adjusting values, the apparatus comprising:

a set of one or more packet queues;

a storage mechanism configured to store a residue amount corresponding to the set of said one or more packet queues; and

an update mechanism configured to determine an adjusted packet length of a particular packet associated with the set of one or more packet based on a packet length of the particular packet and the residue amount, and to update the storage mechanism with an updated residue amount.

Claim 16 (original): The apparatus of claim 15, wherein the packet length includes a most significant portion and a least significant portion; and

wherein the update mechanism is configured to identify the adjusted packet length from one of a plurality of possible adjusted packet lengths, the plurality of possible adjusted packet lengths including the most significant portion and one more than the most significant portion.

Claim 17 (original): The apparatus of claim 16, wherein the update mechanism is configured to update the residue amount based on the least significant portion and the residue amount.

Claim 18 (original): The apparatus of claim 15, comprising a packet processing mechanism configured to process packets including processing the particular packet based on the adjusted packet length.

Claim 19 (original): The apparatus of claim 15, comprising a scheduler configured to schedule packets including scheduling the particular packet based on the adjusted packet length.

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Claim 20 (original): The apparatus of claim 15, wherein the first residue amount is a lagging behind indication.

Claim 21 (original): The apparatus of claim 15, wherein the first residue amount is a forward looking indication.

Claim 22 (original): The apparatus of claim 15, wherein the packet length includes a most significant portion and a least significant portion; and

wherein the update mechanism is configured to identify the adjusted packet length from one of a plurality of possible adjusted packet lengths, the plurality of possible adjusted packet lengths consisting of the most significant portion and one more than the most significant portion.

Claim 23 (original): The apparatus of claim 15, wherein the packet length includes a most significant portion and a least significant portion;

and the update mechanism is configured to update the residue amount based on the least significant portion and the residue amount.

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Claim 24 (original): An apparatus for adaptively adjusting values, the apparatus comprising:

means for maintaining a first residue amount corresponding to a first set of one or more packet queues or streams of packets;

means for identifying a first particular packet length of a first packet associated with the first set of said one or more packet queues or streams of packets;

means for determining a first adjusted packet length, corresponding to the first particular packet length, based on the first particular packet length and the first residue amount; and

means for updating the first residue amount based on the first residue amount and the first particular packet length.

Claim 25 (original): The apparatus of claim 24, comprising means for performing one or more packet operations associated with the first packet based on the first adjusted packet length.

Claim 26 (original): The apparatus of claim 24, comprising means for scheduling the first packet based on the first adjusted packet length.

Claim 27 (original): The apparatus of claim 24, wherein the first particular packet length includes a first least significant portion; and

wherein said means for updating the first residue amount includes means for adding the first residue amount and the first least significant portion.

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Claim 28 (original): The apparatus of claim 27, wherein the first particular packet length includes the first least significant portion and a first most significant portion; and wherein said means for determining a first adjusted packet length includes means for identifying whether to use the first most significant portion as the first adjusted packet length or a value based on the first most significant portion.

Claim 29 (original): The apparatus of claim 28, wherein the value is one more than the first most significant portion.

Claim 30 (original): The apparatus of claim 24, wherein the first residue amount is a lagging behind indication.

Claim 31 (original): The apparatus of claim 24, wherein the first residue amount is a forward looking indication.

Claim 32 (currently amended): A computer-readable storage medium ~~containing~~ encoded with computer-executable instructions for performing steps when executed by one or more processing elements for adaptively adjusting values, said steps comprising:

maintaining a first residue amount corresponding to a first set of one or more packet queues or streams of packets;

identifying a first particular packet length of a first packet associated with the first set of said one or more packet queues or streams of packets;

determining a first adjusted packet length, corresponding to the first particular packet length, based on the first particular packet length and the first residue amount; and

updating the first residue amount based on the first residue amount and the first particular packet length.

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Claim 33 (currently amended): The computer-readable storage medium of claim 32, wherein said steps comprise performing one or more packet operations associated with the first packet based on the first adjusted packet length.

Claim 34 (currently amended): The computer-readable storage medium of claim 32, wherein said steps comprise scheduling the first packet based on the first adjusted packet length.

Claim 35 (currently amended): The computer-readable storage medium of claim 32, wherein the first particular packet length includes a first least significant portion; and wherein said updating the first residue amount includes adding the first residue amount and the first least significant portion

Claim 36 (currently amended): The computer-readable storage medium of claim 35, wherein the first particular packet length includes the first least significant portion and a first most significant portion; and

wherein said determining the first adjusted packet length includes identifying whether to use the first most significant portion as the first adjusted packet length or a value based on the first most significant portion.

Claim 37 (currently amended): The computer-readable storage medium of claim 36, wherein the value is one more than the first most significant portion.

Claim 38 (currently amended): The computer-readable storage medium of claim 36, wherein said identifying whether to use the first most significant portion as the first adjusted packet length or a value based on the first most significant portion is performed based on a result of said updating the first residue amount.



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Claim 39 (currently amended): The computer-readable storage medium of claim 36, wherein said steps comprise performing one or more packet operations associated with the first packet based on the first adjusted packet length.

Claim 40 (currently amended): The computer-readable storage medium of claim 36, wherein said steps comprise scheduling the first packet based on the first adjusted packet length.

Claim 41 (currently amended): The computer-readable storage medium of claim 32, wherein the first residue amount is a lagging behind indication.

Claim 42 (currently amended): The computer-readable storage medium of claim 32, wherein the first residue amount is a forward looking indication.